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Post Box No. 1603, Cochin - 682 018
www.cmfri.org.in



A note on the seasonal abundance of 'Ghol', *Protonibea diacanthus* (Lacepede, 1802) at Bassien koliwada, Maharashtra

B.B. CHAVAN, SUJIT SUNDARAM, THAKUR DAS AND B.G. KALBATE

Mumbai Research Centre of CMFRI, Mumbai

P*rotonibea diacanthus*, locally known as 'Ghol' is one of the commercially important fishes of northwest coast of India. The swim bladder of *Ghol*, after sun drying, is processed into clarifying agent for the beverage industry. The bladder of this species fetches a very high market price owing to its excellent quality.

Bassien koliwada situated about 66 km from Mumbai is a landing centre where *dol* netters operate exclusively. Two types of *dol* netters are operated here, one with smaller cod end mesh size of 20-25 mm targeting *Harpadon nehereus* and the other with larger mesh size of 60-65 mm targeting *Pampus argenteus*. *Ghol* is landed as a bycatch in *dol* nets from this area. A bumper catch of 20,059 kg. of *Ghol* was landed at Bassien Koliwada (Plate 1 & 2) on 26-10-07, by a *dol* netter operating twenty nets in a single haul by a 15 m boat fitted with 90 HP engine. The fishing was carried out at a depth of 40-55 m and at a distance of 30-35 km in the northwest coast off Jaffrabad in Saurashtra region of Gujarat. The cod end mesh size of the *dol* net was 60 mm. The catch included *Pampus argenteus* (380 kg), *Chirocentrus dorab* (45 kg), *Scombroides lysan* (118 kg), *Pellona ditchella* (75 kg) and *Ilisha* spp. (125 kg).

Out of 4,036 numbers of *Ghol* landed, 129 specimens ranging in total length (TL) between 660 mm and 1179 mm, weighing between 1.9 kg and 8.1 kg, were measured and the size-composition



Plate 1. Heavy landing of *Ghol* at Bassein koliwada by *dol* net



Plate 2. Heavy landing of *Ghol*

indicated a mode at 1100-1139 mm (Fig 1). The gutted flesh was sold at a rate of Rs. 53/kg, which amounted to Rs. 10,63,122 approximately without the air bladder.

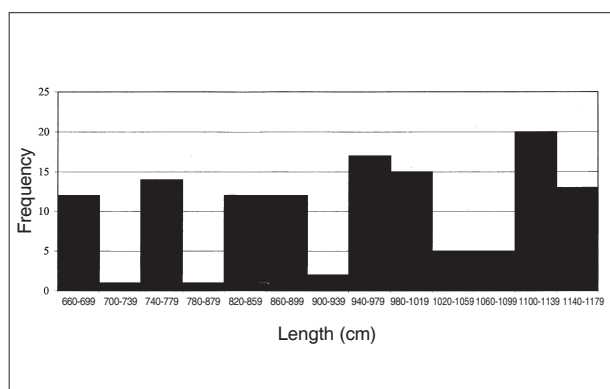


Fig 1. Length frequency of *Protonibea diacanthus* landed at Bassien Koliwada by dol netter

The bladder was removed by cutting open the stomachs at the landing center (Plate 3) and was sold separately fetching an amount of Rs. 55,99,950. The air bladders of the fish were segregated into three



Plate 3. Removing the air bladder of *Ghol*

observed that the present landing of *Ghol* is maximum in terms of the number of specimens caught. It is interesting to note that such heavy landings are usually recorded during the months October-November, indicating the seasonal abundance of this species during this period. According to Subba Rao, 1963, juveniles (20-30 mm) and large sized *Ghol* (900-1200 mm) are caught in

Table 1. Earlier instances of heavy landings of 'Ghol' at Maharashtra

Landing centre	Month	Length range (mm)	Total weight (t)	No. of specimens	Source
Versova	November' 84	700-900	5.50	352	Chakraborty & Dias MFIS-70, 1986
Satpati	November' 86	85-120	39.52	3218	Karbharo <i>et al.</i> MFIS-79, 1987
Bassien koliwada	October' 92	810-1560	3.48	--	Hotagi Jaydev MFIS-126, 1994
Bassien koliwada	October' 02	690-1210	5.26	569	Chavan <i>et al.</i> MFIS-175, 2003
Bassien koliwada	October' 06	800-1100	8.82	490	Hotagi Jaydev <i>et al.</i> MFIS-191, 2007
Bassien koliwada	October' 07	660-1179	20.05	4036	Present report

categories depending on the size, weight and condition and were sold at the rate of Rs. 1350, 1850 and 2800 per kg. The air bladders of females are preferred to males as they are considered to be of a better quality.

Some of the earlier reports of heavy landings of *Ghol* from this region are given in Table 1. It is

dol net, whereas midsize group (600-900 mm) are conspicuously absent in this net. The size group between 600-900 mm are usually caught by trawlers. A catch of this magnitude indicates that *Ghol* moves in large shoals and would have come to nearshore for feeding. Seasonal occurrence of such an important resource needs to be investigated.